

Question 7:

The purpose of the experiment is to develop a low cost ionospheric sounder using a waveform that is similar to Coastal Oceanographic Dynamics Applications Radars (CODARs – see WRPV745 - CODAR Ocean Sensors). We propose to use a waveform generator (from gra-afch.com) into a low pass filter, that will go into a 20 W power amplifier (60dbco). This is a project that has been run by undergraduate students at Clemson University and the hope is to publish these results in a scientific journal article.

Diagram of Antenna at site:

We are using a 50 ft fiberglass telescoping mast. Our field site is surrounded by pine trees with heights greater than 50 ft.

